

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s): P.T. Keyser et al.
Docket No.: YOR920000048US1
Serial No.: 09/624,963
Filing Date: July 25, 2000
Group: 2178
Examiner: Kyle R. Stork

Title: Methods and Apparatus for Automatic
Page Break Detection

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants (hereinafter referred to as "Appellants") hereby appeal the final rejection of claims 1-4, 11, 19 and 23-25 of the above-identified application.

REAL PARTY IN INTEREST

The present application is assigned to International Business Machines Corporation, as evidenced by an assignment recorded July 25, 2000 in the U.S. Patent and Trademark Office at Reel 11004, Frame 464. The assignee, International Business Machines Corporation, is the real party in interest.

RELATED APPEALS AND INTERFERENCES

There are no known related appeals and interferences.

STATUS OF CLAIMS

Claims 1-4, 11, 19 and 23-25 stand finally rejected under 35 U.S.C. §103(a). Claims 1-4, 11, 19 and 23-25 are appealed.

STATUS OF AMENDMENTS

There has been no amendment filed subsequent to the final rejection. However, a Response to Final Office Action was filed on June 4, 2007, along with the Notice of Appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a computer-based method of processing an electronic document generated in accordance with a handwriting system. The method includes a step of obtaining electronic ink data from the handwriting system, with the ink data being associated with the electronic document. The method also includes a step of automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

An illustrative embodiment discussed in the specification at, for example, page 9, line 17, to page 10, line 25, with reference to FIG. 2, includes a computer-based method (e.g., process 40) of processing an electronic document (e.g., that described by document description 44) generated in accordance with a handwriting system. The method includes a step of obtaining electronic ink data (e.g., 42) from the handwriting system, with the ink data being associated with the electronic document. The method also includes a step (e.g., 46-1 through 46-N) of automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

Independent claim 24 is directed to an apparatus for processing an electronic document generated in accordance with a handwriting system. The apparatus includes at least one processor operative to obtain electronic ink data from the handwriting system, with the ink data

being associated with the electronic document. The at least one processor is further operative to automatically identify, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page. The apparatus also includes a memory, coupled to the at least one processor, which stores the electronic ink data associated with the electronic document.

An illustrative embodiment discussed in the specification at, for example, page 7, line 18, to page 9, line 16, with reference to FIG. 1, includes an apparatus (e.g., personal computer (PC) 20) for processing an electronic document generated in accordance with a handwriting system. The apparatus includes at least one processor (e.g. 22) operative to obtain electronic ink data (e.g., that from digitizer 12 and stored in ink data storage 24) from the handwriting system, with the ink data being associated with the electronic document. The at least one processor is further operative to automatically identify, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page. The apparatus also includes a memory (e.g., ink data storage 24), coupled to the at least one processor, which stores the electronic ink data associated with the electronic document.

Independent claim 25 is directed to an article of manufacture for processing an electronic document generated in accordance with a handwriting system, comprising a machine readable medium containing one or more programs. When executed, the one or more programs implement a step of obtaining electronic ink data from the handwriting system, with the ink data being associated with the electronic document. The one or more programs are further operative to implement a step of automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also

generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

An illustrative embodiment discussed in the specification at, for example, page 9, lines 12-16, includes an article of manufacture for processing an electronic document generated in accordance with a handwriting system, comprising a machine readable medium containing one or more programs. The one or more programs, when executed, may implement steps discussed in the specification at, for example, page 9, line 17, to page 10, line 25, with reference to FIG. 2. The one or more programs may implement a step of obtaining electronic ink data (e.g., 42) from the handwriting system, with the ink data being associated with the electronic document. The one or more programs may also implement a step (e.g., 46-1 through 46-N) of automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

The claimed invention provides a number of significant advantages over conventional arrangements. As discussed in the specification at, for example, page 2, lines 15-19, principles of the present invention provide automated techniques for assigning electronic ink to electronic pages in a handwriting system (by way of example only, a personal digital notepad or PDN) such that the correspondence between the electronic ink and the electronic pages matches the correspondence between the physical ink and the physical page, as closely as possible.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

(I) Whether claims 1-4, 24 and 25 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 6,128,633 to Michelman et al. (hereinafter “Michelman”) in view of U.S. Patent No. 5,838,819 to Ruedisueli et al. (hereinafter “Ruedisueli”);

(II) Whether claim 11 is unpatentable under 35 U.S.C. §103(a) over Michelman in view of Ruedisueli and further in view of U.S. Patent No. 6,502,114 to Forcier (hereinafter “Forcier”) and U.S. Patent No. 5,911,146 to Johari et al. (hereinafter “Johari”);

(III) Whether claim 19 is unpatentable under 35 U.S.C. 103(a) over Michelman in view of Ruedisueli and in further view of U.S. Patent No. 5,805,118 to Mishra et al. (hereinafter “Mishra”); and

(IV) Whether claim 23 is unpatentable under 35 U.S.C. 103(a) over Michelman in view of Ruedisueli, Forcier and Johari and in further view of U.S. Patent No. 5,909,221 to Nakai et al. (hereinafter “Nakai”).

ARGUMENT

Appellants incorporate by reference herein the disclosure of all previous responses filed in the present application, including responses dated January 12, 2004; July 6, 2004 and January 11, 2007, as well as the previously-filed Supplemental Appeal Brief dated May 8, 2006 and the Reply Brief dated August 14, 2006.

(I) Claims 1-4, 24 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,128,633 to Michelman et al. (hereinafter “Michelman”) in view of U.S. Patent No. 5,838,819 to Ruedisueli et al. (hereinafter “Ruedisueli”).

Regarding issue (I) with respect to the §103(a) rejection of claims 1-4, 24 and 25, Appellants again respectfully assert, as first set out in their previous response dated January 12, 2004, that the Michelman/Ruedisueli combination fails to establish a proper case of obviousness under 35 U.S.C. §103(a), as specified in MPEP §2143. For the same reasons, as are elaborated below, Appellants believe that the combination fails to teach or suggest all of the limitations of the subject claims, and the combination is not otherwise properly formed.

To reiterate, as set forth in MPEP §2143, three requirements must be met to establish a proper case of obviousness. First, there must be some suggestion or motivation to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited combination must teach or suggest all the claim limitations. While it is sufficient to show that a proper case of obviousness has not been established by showing that one of the requirements has not been met, Appellants respectfully believe that none of the requirements have been met.

First, there is a clear lack of motivation to combine the references. For at least this reason, a proper case of obviousness has not been established. Michelman is directed to a method of manipulating page breaks in documents created in accordance with standard word processing and spreadsheet applications such as Microsoft Word and Excel (see columns 1 and 2 of Michelman), while Ruedisueli is directed to a method of processing electronic copies of handwritten notes. That is, the teachings in each reference are directed to completely different environments; one (Michelman) toward standard word processing and spreadsheet applications, the other (Ruedisueli) toward a handwritten note processing environment. Thus, while Ruedisueli is related to a handwriting system, Michelman has nothing to do with a handwriting system. However, other than a very general and conclusory statement in the Office Action, there is nothing in the two references that reasonably suggests why one would actually combine the teachings of these two references.

In the present Office Action at page 3, the Examiner provides the following statement to prove motivation to combine Michelman and Ruedisueli, with emphasis supplied: “[i]t would have been obvious to one of ordinary skill at the time of the invention to apply Ruedisueli to Michelman, providing Michelman the benefit of adding [an] electronic notepad . . . as taught by Ruedisueli . . . to the automatic page break pagination . . .”

In the present Office Action at pages 8-9, the Examiner provides the following restatement (i.e., changed from the previous final Office Action) to prove motivation to combine Michelman and Ruedisueli, with emphasis supplied: “As the examiner has stated on previous occasions, it would have been obvious to one of ordinary skill at the time of the invention to combine Ruedisueli and Michelman, since it would have allowed a user to add the electronic notepad having devices operatively connected to . . . display copies having automatic page break pagination This proposed combination allows for automatic page breaks within an electronic notepad.”

Despite the elaboration added by the Examiner in the present Office Action, Appellants submit that the above-quoted statements of motivation provided by the Examiner appear to be conclusory statements of the sort rejected by both the Federal Circuit and the U.S. Supreme Court. See KSR v. Teleflex, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (U.S., Apr. 30,

2007), quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

More specifically, other than citing disparate portions of each of the references, the Examiner fails to identify any objective evidence of record which supports the proposed combination. That is, there is no objective support given for why one would be motivated to modify techniques (Michelman) that have nothing to do with a handwriting system to include techniques associated with a handwriting system (Ruedisueli).

Moreover, the statement above is using the benefit obtained from a combination as a motivation for that combination; this is impermissible hindsight. In order to avoid the improper use of a hindsight-based obviousness analysis, particular findings must be made as to why one skilled in the relevant art, having no knowledge of the claimed invention, would have combined the teachings of Michelman and Ruedisueli in the claimed manner. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). The Examiner’s conclusory statements do not adequately address the issue of motivation to combine references. “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to ‘[use] that which the inventor taught against its teacher.’” In re Sang-Su Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

Second, Appellants reassert that there is no reasonable expectation of success in achieving the present invention through a combination of Michelman and Ruedisueli. For at least this reason, a proper case of obviousness has not been established. Despite the assertion in the present Office Action, Appellants do not believe that Michelman and Ruedisueli are combinable since it is not clear how one would combine them. That is, how would one implement techniques relating to a handwriting system in a system that does not process handwriting. There was no guidance provided in the previous Office Action, and there is no guidance given in the present Office Action. However, even if combined, for the sake of argument, they would not achieve the techniques of the claimed invention.

The Examiner's argument on page 9 of the present Office Action fails to remedy this fundamental defect. Despite the Examiner's repetition of the above-quoted assertion that "it would have allowed a user to add the electronic notepad having devices operatively connected to . . . display copies having automatic page break pagination," the Examiner has failed to produce any guidance as to how one could combine Michelman and Ruedisueli to achieve the present invention, even assuming such a combination could achieve the techniques of the claimed invention. Accordingly, Appellants respectfully disagree with the Examiner's belief that "he has fulfilled the requirement for reasonable expectation of success."

Third, Appellants reassert that even if combinable, the Michelman/Ruedisueli combination fails to teach or suggest all of the limitations of the claims. For at least this reason, a proper case of obviousness has not been established.

For example, as asserted in Appellants' previous response dated January 12, 2004, the Michelman/Ruedisueli combination fails to teach or suggest "automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page," as in the claimed invention.

For example, as the present specification explains at page 1, line 15, to page 2, line 2:

[In accordance with existing techniques,] . . . to maintain . . . accurate correspondence between the physical page and the electronic copy, the writer is required to "turn" the electronic page when changing to a new or previous paper page by pressing the corresponding page-forward or page-backward button on the PDN [personal digital notepad]. These buttons effect synchrony between the physical and electronic page by recording these events in the data stream. Asynchrony between the paper and electronic pages occurs when a writer forgets to press the appropriate button on the device or accidentally presses the button too many times. Subsequent writing is then electronically recorded on the wrong electronic page, and the new electronic ink is recorded on top of the page's original electronic ink. This problem may be compounded since the user may flip forward or backward by several pages at a time and may do so several times within a single document. Later, when the resultant electronic page is viewed, the merged original and overwritten electronic ink can be confusing and may be difficult to read and correct.

To address this problem, the claimed invention automatically identifies, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

A key aspect with respect to the claimed invention is that the potential page breaks are automatically identified. So, even if a writer forgets to press the appropriate button on the device or accidentally presses the button too many times, causing asynchrony between the paper and electronic pages, the claimed invention automatically identifies, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

As the Examiner correctly concedes on page 9 of the present Office Action, “Ruedisueli fails to teach the limitation. . . . However, Michelman discloses the limitation (abstract).” While Michelman mentions allowing a user to select a page break via a graphical user interface and then adjusting the page breaks for the remainder of a document, again, the initial selection is still a manual process, not an automated process. The problem is that this manual signaling could be wrong, or the user could just forget to manually signal a page change, resulting in the above-described asynchrony problem. Michelman provides no solutions for this problem. Moreover, Michelman has nothing to do with handwriting systems and, therefore, does not address the unique electronic/physical page asynchrony problem associated with handwriting systems.

Thus, the cited combination contains no teaching of automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page, as in the claimed invention.

In the Examiner's Answer mailed on June 14, 2006, the Examiner fails to address all of Appellants' arguments. In addition, the Examiner's Answer raises some new points with which Appellants strongly disagree. Appellants addressed these issues in their Reply Brief dated August 14, 2006. As explained therein, the Examiner's Answer at pages 9-10 states:

In claim 1, the applicant indicates inserting one or more page breaks in the electronic document and also maintaining page correspondence between an electronic and a physical document in a handwriting system, however, it is unclear whether [sic] the asynchrony of the pages are electronic and physical pages that are related. The claim does not explain what is meant by asynchrony.

As noted above, Appellants argue that the Michelman/Ruedisueli combination fails to teach or suggest "automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page," as in the claimed invention.

Thus, the claim expressly indicates that one or more potential page breaks are automatically identified for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page. Appellants therefore do not understand how it could be asserted that "[t]he claim does not explain what is meant by asynchrony," as is asserted in the Examiner's Answer, since the claim expressly refers to maintaining a page correspondence between the electronic document and a physical document . . . so as to at least partially reduce asynchrony between an electronic page and a physical page.

Next, the Examiner's Answer at page 10 states:

It is also well known in the art that word processors as well as hand written pen-based text can be used for text data. It is well known that both environments can be introduced in identifying page breaks.

Appellants are not completely certain of the relevance of this statement. To the degree that the statement is intended to show some motivation to combine Michelman and Ruedisueli, Appellants assert that this is not proper motivation to combine the references, as will be further reiterated below. To the degree that the statement suggests rationale for why the Examiner continues to assert that Ruedisueli teaches the automated identification operation of the claimed invention, Appellants strongly disagree for the reasons given above.

Next, the Examiner's Answer at page 10 states:

The applicant argues that the prior art does not mention that the potential page breaks are not [sic] automatically identified (Page 7 Para 1-3). However, in Michelman, a system process performs the steps of moving the selected page break to the new location and adjusting the scaling and the automatic page-breaks for the remainder of the document to accommodate the page break at the new location. (Michelman Abstract)

As mentioned above, a key aspect with respect to the claimed invention is that the potential page breaks are automatically identified. Again, even if a writer forgets to press the appropriate button on the device or accidentally presses the button too many times, causing asynchrony between the paper and electronic pages, the claimed invention automatically identifies, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page. This is clearly not the case with Michelman, wherein the Michelman technique operates after the user manually selects a page-break within the electronic document and then manually identifies a new location for the page-break (see Michelman Abstract).

Furthermore, the Examiner's Answer at page 10 states:

Regarding claims 1, 24 and 25 Applicant argues that there is a lack of motivation as to why Michelman would be combined with Ruedisueli (Page 4 Para 6 and 7). Michelman would be motivated to add to the electronic notepad, which includes devices operatively connected to the electronic notepad for operating with the electronic notepad to receive, manage, merge, and/or display the electronic copies from the electronic notepad as taught by Ruedisueli Abstract Lines 8-12 to automatic page break pagination which performs the steps of

moving the selected page break to the new location and adjusting the remainder of the document to accommodate the page-break at the new location as taught by Michelman Col 4 Lines 45-49.

This above statement still fails to support the rationale to combine, since it simply states that something alleged about Michelman could be added to something alleged about Ruedisueli without stating why one would add the two together.

As mentioned above, to the degree that the Examiner's statement at page 10 of the Examiner's Answer ("It is also well known in the art that word processors as well as hand written pen-based text can be used for text data. It is well known that both environments can be introduced in identifying page breaks.") is intended to support motivation to combine the references, Appellants do not see how such a statement serves as objective support for why one would be motivated to modify techniques (Michelman) that have nothing to do with a handwriting system to include techniques associated with a handwriting system (Ruedisueli).

For at least these reasons, it is asserted that independent claims 1-4, 24 and 25 are patentable over Michelman and Ruedisueli.

(II) Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Michelman in view of Ruedisueli and further in view of U.S. Patent No. 6,502,114 to Forcier (hereinafter "Forcier") and U.S. Patent No. 5,911,146 to Johari et al. (hereinafter "Johari").

Regarding issue (II) and the §103(a) rejection of the dependent claim, Appellants respectfully assert that the combination, based on Michelman/Ruedisueli that also includes Forcier and Johari, also fails to establish proper cases of obviousness under 35 U.S.C. §103(a), as specified in MPEP §2143, and is otherwise deficient for failing to teach or suggest all claim limitations and for being improperly formed. Such dependent claim is patentable over the cited combination not only due to its dependence on an above-mentioned independent claim but also because such claim recites patentable subject matter in its own right.

For example, dependent claim 11 recites the step of determining a confidence measure for the potential page break associated with the possible insertion point. However, the rejection

relies on Johari which relates to a commercial telephone directory. It is believed that Johari is not properly combinable with Michelman and Ruedisueli since there is no clear support for how or why one would combine such disparate references. Even if combinable, for the sake of argument, the advertisement stream page break is not the same as the claimed feature. Furthermore, the final Office Action makes no mention of Forcier in its rejection rationale.

In the present Office Action at page 6, the Examiner asserts: "It would have been obvious to one of ordinary skill at the time of the invention to apply Johari to Michelman, providing Michelman the benefit of determining a confidence measure for a potential page break that can be randomly selected." Appellants respectfully submit that this appears to be a conclusory statement of the sort rejected by both the Federal Circuit and the U.S. Supreme Court. See KSR v. Teleflex, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (U.S., Apr. 30, 2007), quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.").

More specifically, the Examiner fails to identify any objective evidence of record which supports the proposed combination. Instead, the statement above merely uses the benefit obtained from a combination as a motivation for that combination and thus relies exclusively on impermissible hindsight. In order to avoid the improper use of a hindsight-based obviousness analysis, particular findings must be made as to why one skilled in the relevant art, having no knowledge of the claimed invention, would have combined the references in the claimed manner. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). The Examiner's conclusory statements do not adequately address the issue of motivation to combine references. "It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to '[use] that which the inventor taught against its teacher.'" In re Sang-Su Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983))

For at least these reasons, it is asserted that claim 11 is patentable over the cited combination.

(III) Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelman in view of Ruedisueli and in further view of U.S. Patent No. 5,805,118 to Mishra et al. (hereinafter “Mishra”).

Regarding issue (III) and the §103(a) rejection of the dependent claim, Appellants respectfully assert that the combination, based on Michelman/Ruedisueli/Mishra, also fails to establish proper cases of obviousness under 35 U.S.C. §103(a), as specified in MPEP §2143, and is otherwise deficient for failing to teach or suggest all claim limitations and for being improperly formed. Such dependent claim is patentable over the cited combination not only due to its dependence on an above-mentioned independent claim but also because such claim recites patentable subject matter in its own right.

By way of example, dependent claim 19 recites the step of automatically identifying one or more potential page breaks by utilizing a learning algorithm. However, the rejection relies on Mishra which relates to a display protocol specification with session configuration and multiple monitors. It is believed that Mishra is not properly combinable with Michelman and Ruedisueli since there is no clear support for how or why one would combine such disparate references. Even if combinable, for the sake of argument, just because Mishra mentions a learning algorithm does not mean Mishra discloses the claimed feature.

In the present Office Action at pages 6-7, the Examiner asserts: “It would have been obvious to one of ordinary skill at the time of the invention to apply Mishra to Michelman, providing Michelman the benefit of utilizing a learning algorithm.” Appellants respectfully submit that this appears to be a conclusory statement of the sort rejected by both the Federal Circuit and the U.S. Supreme Court. See KSR v. Teleflex, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (U.S., Apr. 30, 2007), quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

More specifically, the Examiner fails to identify any objective evidence of record which supports the proposed combination. Instead, the statement above merely uses the benefit

obtained from a combination as a motivation for that combination and thus relies exclusively on impermissible hindsight. In order to avoid the improper use of a hindsight-based obviousness analysis, particular findings must be made as to why one skilled in the relevant art, having no knowledge of the claimed invention, would have combined the references in the claimed manner. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). The Examiner's conclusory statements do not adequately address the issue of motivation to combine references. "It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to '[use] that which the inventor taught against its teacher.'" In re Sang-Su Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

For at least these reasons, it is asserted that claim 19 is patentable over the cited combination.

(IV) Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelman in view of Ruedisueli, Forcier and Johari and in further view of U.S. Patent No. 5,909,221 to Nakai et al. (hereinafter "Nakai").

Regarding issue (IV) and the §103(a) rejection of the dependent claim, Appellants respectfully assert that the combination, based on Michelman/Ruedisueli/Forcier/Johari/Nakai, also fails to establish proper cases of obviousness under 35 U.S.C. §103(a), as specified in MPEP §2143, and is otherwise deficient for failing to teach or suggest all claim limitations and for being improperly formed. Such dependent claim is patentable over the cited combination not only due to its dependence on an above-mentioned independent claim but also because such claim recites patentable subject matter in its own right.

By way of example, dependent claim 23 recites the step of identifying a potential page break as a point offset from a possible insertion point determined in accordance with a scoring procedure. However, the rejection relies on Johari which relates to a commercial telephone directory. Again, it is believed that Johari is not properly combinable with Michelman and Ruedisueli since there is no clear support for how or why one would combine such disparate

references. Even if combinable, for the sake of argument, any score disclosed in Johari is not the same as the claimed feature. Furthermore, the final Office Action makes no mention of Forcier or Nakai in its rejection rationale.

In the present Office Action at page 8, the Examiner asserts: “It would have been obvious to one of ordinary skill at the time of the invention to apply Johari to Michelman, providing Michelman the benefit of applying the scoring procedure to the page breaks.” Appellants respectfully submit that this appears to be a conclusory statement of the sort rejected by both the Federal Circuit and the U.S. Supreme Court. See KSR v. Teleflex, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (U.S., Apr. 30, 2007), quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

More specifically, the Examiner fails to identify any objective evidence of record which supports the proposed combination. Instead, the statement above merely uses the benefit obtained from a combination as a motivation for that combination and thus relies exclusively on impermissible hindsight. In order to avoid the improper use of a hindsight-based obviousness analysis, particular findings must be made as to why one skilled in the relevant art, having no knowledge of the claimed invention, would have combined the references in the claimed manner. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). The Examiner’s conclusory statements do not adequately address the issue of motivation to combine references. “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to ‘[use] that which the inventor taught against its teacher.’” In re Sang-Su Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983))

For at least these reasons, it is asserted that claim 23 is patentable over the cited combination.

In view of the above, Appellants believe that claims 1-4, 11, 19 and 23-25 are in condition for allowance, and respectfully request withdrawal of the §103(a) rejections.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William E. Lewis". The signature is fluid and cursive, with a large initial "W" and a long, sweeping underline.

Date: August 6, 2007

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APPENDIX

1. A computer-based method of processing an electronic document generated in accordance with a handwriting system, the method comprising the steps of:

obtaining electronic ink data from the handwriting system, the ink data being associated with the electronic document; and

automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

2. The method of claim 1, wherein the handwriting system is a personal digital notepad.

3. The method of claim 1, further comprising the step of automatically inserting the one or more identified potential page breaks in the electronic document.

4. The method of claim 1, further comprising the step of presenting the one or more identified potential page breaks to a user for approval to automatically insert the one or more identified potential page breaks in the electronic document.

11. The method of claim 1, further comprising the step of determining a confidence measure for the potential page break associated with the possible insertion point.

19. The method of claim 1, wherein the step of automatically identifying one or more potential page breaks further comprises the steps of utilizing a learning algorithm.

23. The method of claim 1, wherein the step of automatically identifying one or more potential page breaks further comprises the step of identifying a potential page break as a point offset from a possible insertion point determined in accordance with a scoring procedure.

24. Apparatus for processing an electronic document generated in accordance with a handwriting system, the apparatus comprising:

at least one processor operative to: (i) obtain electronic ink data from the handwriting system, the ink data being associated with the electronic document; and (ii) automatically identify, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page; and

a memory, coupled to the at least one processor, which stores the electronic ink data associated with the electronic document.

25. An article of manufacture for processing an electronic document generated in accordance with a handwriting system, comprising a machine readable medium containing one or more programs which when executed implement the steps of:

obtaining electronic ink data from the handwriting system, the ink data being associated with the electronic document; and

automatically identifying, using at least a portion of the electronic ink data, one or more potential page breaks for possible insertion in the electronic document to maintain a page correspondence between the electronic document and a physical document also generated in accordance with the handwriting system, and so as to at least partially reduce asynchrony between an electronic page and a physical page.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.